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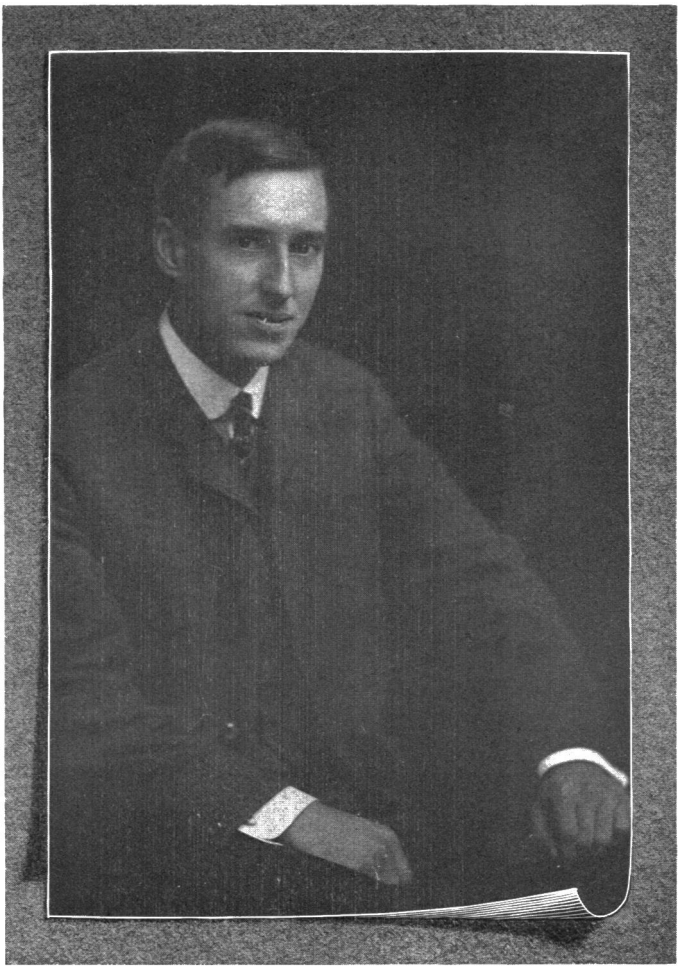
BIOLOGICAL BULLETIN

ARTHUR W. GREELEY.

Arthur W. Greeley died at St. Louis, after an operation for appendicitis, on March 15, 1904, at the age of twenty-eight. The following paper, which he had prepared for publication just before his death, will indicate how lamentable for American science is the loss of this enthusiastic, industrious and keen investigator.

In this suggestive paper, explaining on the basis of modern physical chemistry the changes in structure of protoplasm accompanying changes in function, Greeley has mapped out for others work which he had planned for himself, but which he was unable to accomplish. There has been hitherto no thorough study of the changes in structure of living protoplasm produced by salts from the standpoint of modern views of electrolytes and colloidal solutions. This paper is a most important contribution to this subject and opens up a great field for further work. It was Greeley's good fortune to be able to reduce the changes to order, and thus to supply the structural basis for observed changes in function produced by salts and other agencies. As a result of this work he was able to reduce many of the so-called "tropic" responses of organisms to a common basis; all agencies producing a certain change in the protoplasm producing also a definite response in orientation of the organism. What a great step in advance this is will be appreciated by those familiar with the confusion prevailing in this most difficult field.

This paper, in connection with his earlier discoveries of the production of spores in infusoria by cold; on the identity of the physiological action of dehydration and exposure to low temperatures, and of the production of artificial parthenogenesis in the echinoderm egg by cold, stamps Greeley as an original,



ARTHUR W. GREELY.

industrious and accurate investigator of great scientific ability, doing work of a most fundamental character. All of those who knew him feel that in his death a man of great promise has passed away.

Dr. Greeley was born in Oswego, New York State, in 1875. He took his undergraduate degree in Stanford University in 1898, and spent one year as a graduate student in zoölogy, during which he went to Alaska with the fur-seal expedition and to Brazil with the Agassiz expedition. The following year he was a teacher in the State Normal School at San Diego, leaving there to enter the University of Chicago as fellow in physiology. Two years later he took his doctorate of philosophy under Loeb with a thesis on the action of low temperatures on the infusoria, and was then appointed Assistant Professor of Zoölogy at the Washington University, in St. Louis. For three summers he was a member of the staff of instruction in physiology at the Marine Biological Laboratory of Wood's Holl. During his two years of residence in St. Louis his enthusiasm and unusual personality had already aroused marked interest in biological science in that city.

Dr. Greeley was of a rare and winning personality, remarkable for extraordinary enthusiasm which inspired all with whom he came in contact. He had a happy disposition, great courage and high principles. His frank open nature, his consideration for others and his loyalty made him many friends ; and he had no enemies. He was an inspiring teacher. To his university, to his friends and to his colleagues his sad death at the outset of a most promising career is an irreparable loss.

A. P. MATHEWS.